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SQUIRE, SANDERS & DEMPSEY L.L.P.
14TH FLOOR
8000 TOWERS CRESCENT
TYSONS CORNER, VA 22182

EXAMINER	
ADAMS, CHARLES D	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/629,910	LILLQVIST ET AL.	
	Examiner	Art Unit	
	Charles D. Adams	2164	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-20 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Remarks

1. In response to communications filed on 1 June 2007, claim 4 is amended. Claims 1-20 are pending in the application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-4 and 9-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shen (US Pre-Grant Publication 2001/0010690) in view of Kim et al. (US Pre-Grant Publication 2002/0083198).

As to claim 1, Shen teaches:

Receiving data to be supplied to database operations, the data including at least one Internet domain name comprising a plurality of successive labels separated by dots, said at least one Internet domain name being in a first format (see paragraph [0031]);

Shen does not teach conditionally converting at least one of said at least one Internet domain name into a second format in which at least two successive labels of the at least one of said at least one Internet domain name are combined to form a single

label, wherein the conditionally converting comprises converting the Internet domain name when the Internet domain name fulfills a predetermined condition; and

Kim et al. teaches conditionally converting at least one of said at least one Internet domain name into a second format in which at least two successive labels of the at least one of said at least one Internet domain name are combined to form a single label, wherein the conditionally converting comprises converting the Internet domain name when the Internet domain name fulfills a predetermined condition (see paragraphs [0034]-[0035]. Conversion only occurs if the number entered contains a '#' sign); and

Supplying the data to the database operations, the supplied data including at least one Internet domain name in the second format (see paragraphs [0034]-[0035]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Shen by the teaching of Kim et al., since Kim et al. teaches that "the telephone terminal is regarded as a miniaturized Internet host that accommodates all the various services in the Internet. Therefore, it corresponds the telephone number to an IP address" and ""the telephone terminal has been settled down as a perfect Internet host, not as a simple service access terminal. Therefore, such a new idea that a telephone number corresponds directly to an IP address may be important and have a very high effective in the future Internet environment" (see paragraphs [0005]-[0006]).

As to claim 2, Shen as modified teaches:

Examining whether an Internet domain name fulfills the predetermined condition in the first format (see Kim et al. paragraph [0034]).

As to claim 3, Shen as modified teaches wherein the examining step includes examining whether said Internet domain name includes at least a predetermined number of labels beyond a given origin, said labels having a predetermined maximum length (see Kim et al. paragraphs [0030] and [0034]. If there is more than one distinct label, they will be separated. The labels have a predetermined max length of 15 digits).

As to claim 4, Shen as modified teaches wherein the predetermined condition upon which the converting is conditional is whether the Internet domain name includes at least the predetermined number of labels beyond the given origin, such that the converting is performed for said Internet domain name when the examining indicates that the Internet domain name includes at least the predetermined number of labels beyond the given origin, said labels having the predetermined maximum length, and the converting is not performed when the examining indicates that the Internet domain name does not include at least the predetermined number of labels (see Kim et al. paragraphs [0034]-[0035]. If there is more than one label, the name is converted to a single label).

As to claim 9, Shen teaches:

First means for receiving data to be supplied to database operations, the data including at least one Internet domain name comprising a plurality of successive labels separated by dots, said at least one Internet domain name being in a first format (see paragraph [0031]);

Shen does not teach second means for conditionally converting at least one of said at least one Internet domain name into a second format in which at least two successive labels of the at least one of said at least one Internet domain name are combined to form a single label, wherein the second means is configured to convert the Internet domain name when the Internet domain name fulfills a predetermined condition; and

Kim et al. teaches second means for conditionally converting at least one of said at least one Internet domain name into a second format in which at least two successive labels of the at least one of said at least one Internet domain name are combined to form a single label, wherein the second means is configured to convert the Internet domain name when the Internet domain name fulfills a predetermined condition (see paragraphs [0034]-[0035]. Conversion only occurs if the number entered contains a '#' sign); and

Shen as modified teaches third means for supplying the data to database operations, the supplied data including at least one Internet domain name in the second format (see paragraphs [0034]-[0035]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Shen by the teaching of Kim et al., since

Kim et al. teaches that "the telephone terminal is regarded as a miniaturized Internet host that accommodates all the various services in the Internet. Therefore, it corresponds the telephone number to an IP address" and ""the telephone terminal has been settled down as a perfect Internet host, not as a simple service access terminal. Therefore, such a new idea that a telephone number corresponds directly to an IP address may be important and have a very high effective in the future Internet environment" (see paragraphs [0005]-[0006]).

As to claim 10, Shen as modified teaches:

Fourth means for examining whether an Internet domain name fulfills the predetermined condition, the second means being configured to convert the Internet domain name into the second format when the Internet domain name fulfills the predetermined condition (see Kim et al. paragraph [0034]).

As to claim 11, Shen teaches:

A first interface configured to receive data to be supplied to database operations, the data including at least one Internet domain name comprising a plurality of successive labels separated by dots, said at least one Internet domain name being in a first format (see paragraph [0031]);

Shen does not teach a modification module, operably connected to the first interface, configured to conditionally convert at least one of said at least one Internet domain name into a second format in which at least two successive labels of the at least

one of said at least one Internet domain name form a single label, wherein the modification module is configured to convert the Internet domain name when the Internet domain name fulfills a predetermined condition; and

Kim et al. teaches a modification module, operably connected to the first interface, configured to conditionally convert at least one of said at least one Internet domain name into a second format in which at least two successive labels of the at least one of said at least one Internet domain name form a single label, wherein the modification module is configured to convert the Internet domain name when the Internet domain name fulfills a predetermined condition (see paragraphs [0034]-[0035]. Conversion only occurs if the number entered contains a '#' sign); and

Shen as modified teaches:

A second interface, operably connected to the modification module, configured to supply the data to database operations, the supplied data including at least one Internet domain name in the second format (see paragraphs [0034]-[0035]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Shen by the teaching of Kim et al., since Kim et al. teaches that "the telephone terminal is regarded as a miniaturized Internet host that accommodates all the various services in the Internet. Therefore, it corresponds the telephone number to an IP address" and ""the telephone terminal has been settled down as a perfect Internet host, not as a simple service access terminal. Therefore, such a new idea that a telephone number corresponds directly to an IP

address may be important and have a very high effective in the future Internet environment" (see paragraphs [0005]-[0006]).

As to claim 12, Shen teaches:

Receiving data to be supplied to database operations, the data including at least one Internet domain name comprising a plurality of successive labels separated by dots, said at least one Internet domain name being in a first format (see paragraph [0031]);

Shen does not teach:

Conditionally converting at least one of said at least one Internet domain name into a second format in which at least two successive labels of the at least one of said at least one Internet domain name are combined to form a single label, wherein the conditionally converting comprises converting the Internet domain name when the Internet domain name fulfills a predetermined condition; and

Kim et al. teaches:

Conditionally converting at least one of said at least one Internet domain name into a second format in which at least two successive labels of the at least one of said at least one Internet domain name are combined to form a single label, wherein the conditionally converting comprises converting the Internet domain name when the Internet domain name fulfills a predetermined condition (see paragraphs [0034]-[0035]. Conversion only occurs if the number entered contains a '#' sign); and

Shen as modified teaches:

Supplying the data to the database operations, the supplied data including at least one Internet domain name in the second format (see paragraphs [0034]-[0035]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Shen by the teaching of Kim et al., since Kim et al. teaches that "the telephone terminal is regarded as a miniaturized Internet host that accommodates all the various services in the Internet. Therefore, it corresponds the telephone number to an IP address" and ""the telephone terminal has been settled down as a perfect Internet host, not as a simple service access terminal. Therefore, such a new idea that a telephone number corresponds directly to an IP address may be important and have a very high effective in the future Internet environment" (see paragraphs [0005]-[0006]).

As to claim 13, Shen teaches:

A receiver unit configured to receive data to be supplied to database operations, the data including at least one Internet domain name comprising a plurality of successive labels separated by dots, said at least one Internet domain name being in a first format (see paragraph [0031]);

Shen does not teach:

A conversion unit configured to convert at least one of said at least one Internet domain name into a second format in which at least two successive labels of the at least one of said one Internet domain name are combined to form a single labels;

Kim et al. teaches:

A conversion unit configured to convert at least one of said at least one Internet domain name into a second format in which at least two successive labels of the at least one of said one Internet domain name are combined to form a single labels (see paragraphs [0034]-[0035]. Conversion only occurs if the number entered contains a '#' sign);

Wherein the conversion unit is configured to convert the Internet domain name when the Internet domain name fulfills a predetermined condition (see paragraphs [0034]-[0035]. Conversion only occurs if the number entered contains a '#' sign); and

Shen as modified teaches:

A supply unit configured to supply the data to database operations, the supplied data including at least one Internet domain name in the second format (see paragraphs [0034]-[0035]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Shen by the teaching of Kim et al., since Kim et al. teaches that "the telephone terminal is regarded as a miniaturized Internet host that accommodates all the various services in the Internet. Therefore, it corresponds the telephone number to an IP address" and ""the telephone terminal has been settled down as a perfect Internet host, not as a simple service access terminal. Therefore, such a new idea that a telephone number corresponds directly to an IP address may be important and have a very high effective in the future Internet environment" (see paragraphs [0005]-[0006]).

As to claim 14, Shen as modified teaches:

An examination unit configured to examine whether an Internet domain name fulfills a predetermined condition, the conversion unit being configured to convert the Internet domain name into the second format when the Internet domain name fulfills the predetermined condition (see paragraphs [0034]-[0035]. Conversion only occurs if the number entered contains a '#' sign).

As to claim 15, Shen teaches:

First interface means for receiving data to be supplied to database operations, the data including at least one Internet domain name comprising a plurality of successive labels separated by dots, said at least one Internet domain name being in a first format (see paragraph [0031]);

Shen does not teach:

Modification means, operably connected to the first interface means, for conditionally converting at least one of said at least one Internet domain name into a second format in which at least two successive labels of the at least one of said at least one Internet domain name form a single label, wherein the modification means is configured to conditionally convert the Internet domain name when the Internet domain name fulfills a predetermined condition; and

Kim et al. teaches:

Modification means, operably connected to the first interface means, for conditionally converting at least one of said at least one Internet domain name into a

second format in which at least two successive labels of the at least one of said at least one Internet domain name form a single label, wherein the modification means is configured to conditionally convert the Internet domain name when the Internet domain name fulfills a predetermined condition (see paragraphs [0034]-[0035]. Conversion only occurs if the number entered contains a '#' sign); and

Shen as modified teaches:

Second interface means, operably connected to the modification means, for supplying the data to database operations, the supplied data including at leats one Internet domain name in the second format (see paragraphs [0034]-[0035]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Shen by the teaching of Kim et al., since Kim et al. teaches that "the telephone terminal is regarded as a miniaturized Internet host that accommodates all the various services in the Internet. Therefore, it corresponds the telephone number to an IP address" and ""the telephone terminal has been settled down as a perfect Internet host, not as a simple service access terminal. Therefore, such a new idea that a telephone number corresponds directly to an IP address may be important and have a very high effective in the future Internet environment" (see paragraphs [0005]-[0006]).

As to claim 16, Shen as modified teaches wherein the method is configured to enhance database performance in a domain name system (see Shen paragraph [0031],

"to keep the amount of data to be transferred to a minimum, service control point SCP first removes the dots used in Internet addresses to separate number blocks").

As to claim 17, Shen as modified teaches wherein the system comprises fourth means for enhancing the performance of a domain name system (see Shen paragraph [0031], "to keep the amount of data to be transferred to a minimum, service control point SCP first removes the dots used in Internet addresses to separate number blocks").

As to claim 18, Shen as modified teaches wherein the name server is configured to provide enhanced performance for a domain name system (see Shen paragraph [0031], "to keep the amount of data to be transferred to a minimum, service control point SCP first removes the dots used in Internet addresses to separate number blocks").

As to claim 19, Shen as modified teaches wherein the system is configured to provide enhanced performance for a domain name system (see Shen paragraph [0031], "to keep the amount of data to be transferred to a minimum, service control point SCP first removes the dots used in Internet addresses to separate number blocks").

As to claim 20, Shen as modified teaches wherein the name server further comprises enhancement means for enhancing the performance of a domain name system (see Shen paragraph [0031], "to keep the amount of data to be transferred to a

minimum, service control point SCP first removes the dots used in Internet addresses to separate number blocks").

4. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shen (US Pre-Grant Publication 2001/0010690) in view of Kim et al. (US Pre-Grant Publication 2002/0083198).

As to claim 5, Shen as modified does not explicitly teach wherein the predetermined number of labels is three.

However, it would have been obvious for one skilled in the art at the time the invention was made to have further modified Shen to include that limitation, because only a size (predetermined number of labels) is changing between the claimed invention and the prior art (see *In re Rose,* 220 F .2d 459, 105 USPQ 237 (CCPA 1955), *In re Rinehart*, 531 F .2d 1048, 189 USPQ 143 (CCPA 1976), *Gardner v. TEC Systems, Inc.*, 725 F .2d 1338, 220 USPQ 777 (FED Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984) and MPEP 2144.04 IV.A – Changes in Size/Proportion).

In addition to this, it would have been obvious to one of ordinary skill in the art at the time the invention was made because applying a known technique to a known device ready would yield predictable results. In this case, Kim et al. teaches to combine labels wherein if there are two distinct labels, the labels should be combined into one (see Kim et al. paragraph [0034]. In addition to this, Kim et al. shows that one could combine 3 labels together (see paragraph [0034]). Thus, the result of having the

predetermined condition be '3 labels' rather than '2 labels' would have been obvious to one of ordinary skill in the art.

As to claim 6, Shen as modified does not teach wherein the predetermined maximum length is one byte.

However, it would have been obvious for one skilled in the art at the time the invention was made to have further modified Shen to include that limitation, because only a size (predetermined maximum length) is changing (see *In re Rose,* 220 F .2d 459, 105 USPQ 237 (CCPA 1955), *In re Rinehart*, 531 F .2d 1048, 189 USPQ 143 (CCPA 1976), *Gardner v. TEC Systems, Inc.*, 725 F .2d 1338, 220 USPQ 777 (FED Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984) and MPEP 2144.04 IV.A – Changes in Size/Proportion)).

In addition to this, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Shen to include wherein the predetermined maximum length of a label is one byte. Kim et al. teaches wherein decimal numbers occupy four bits. As is known in the art, one byte is composed of eight bits. This would mean that two decimal numbers may occupy one byte. Kim et al. teaches a label comprised of two decimal numbers (see paragraph [0035]). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Shen to include try a requirement that all labels be only two numbers long, since Kim et al. teaches in paragraphs [0034]-[0035] that labels can

be identified using '-' or sequentially input, and that all '-' are removed when sending the name address to a DNS.

As to claim 7, Shen as modified does not teach wherein the predetermined maximum length is one byte.

However, it would have been obvious for one skilled in the art at the time the invention was made to have further modified Shen to include that limitation, because only a size (predetermined maximum length) is changing (see *In re Rose,* 220 F .2d 459, 105 USPQ 237 (CCPA 1955), *In re Rinehart*, 531 F .2d 1048, 189 USPQ 143 (CCPA 1976), *Gardner v. TEC Systems, Inc.*, 725 F .2d 1338, 220 USPQ 777 (FED Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984) and MPEP 2144.04 IV.A – Changes in Size/Proportion)).

In addition to this, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Shen to include wherein the predetermined maximum length of a label is one byte. Kim et al. teaches wherein decimal numbers occupy four bits. As is known in the art, one byte is composed of eight bits. This would mean that two decimal numbers may occupy one byte. Kim et al. teaches a label comprised of two decimal numbers (see paragraph [0035]). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Shen to include try a requirement that all labels be only two numbers long, since Kim et al. teaches in paragraphs [0034]-[0035] that labels can

be identified using '-' or sequentially input, and that all '-' are removed when sending the name address to a DNS.

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shen (US Pre-Grant Publication 2001/0010690) in view of Kim et al. (US Pre-Grant Publication 2002/0083198), and further in view of Khello et al. (US Pre-Grant Publication 2003/0007482).

As to claim 8, Shen as modified teaches a method according to claim 1.

Shen does not teach:

-receiving data including another Internet domain name in the second format; and

-converting the another Internet domain name received in the second format back to the first format.

Khello et al. teaches:

-receiving data including another Internet domain name in the second format (see paragraph [0055] and Figure 8. Numbers are entered in a format of a single label); and

-converting the another Internet domain name received in the second format back to the first format (see paragraph [0055] and Figure 8. Numbers entered in a format of a single label are converted to numbers comprised of multiple labels).

since Khello et al. teaches that "the present invention may be used to establish a multimedia or other communications session that includes one or more of the following example applications: voice-over-IP, web surfing, e-mail, videoconferencing, video-on-demand, audio-on-demand, intranet-work access, gaming, and gambling, either with or without a circuit switched voice communication" (see paragraph [0054]).

Response to Arguments

6. Applicant's arguments filed 1 June 2007 have been fully considered but they are not persuasive.

Applicant argues that "none of the network elements receives data to be supplied to database operations, the data including a plurality of successive labels separated by dots". In response to this argument, Examiner notes that, in paragraph [0031] of Shen, the SCP element converts data comprising a plurality of labels separated by dots (149.111.111.111) to a second format (149111111111), and then sends this number to the SSP. The SSP then sets up a link based on this information. This provides a means of setting up a link to an Internet terminal, and, as such, the address is supplied to "database operations".

Applicant argues that Shen does not teach "'data to be supplied to database operations', nor does the data include 'at least one Internet domain name', as recited in claim 1, it is simply an Internet Protocol (IP) address". Applicant's arguments that Shen does not teach 'data to be supplied to database operations' are responded to above. In

response to Applicant's arguments that the data of Shen does not teach an "Internet domain name", it is noted that IP addresses may be allocated directly to entities and remain in possession of that entity. It is also noted that IP addresses map to Domain Names on the Internet. It is also noted that IP addresses can identify "domains". For example, an IP address of 127.0.0.1 will identify the local host. As 'local host' is a 'domain', and as '127.0.0.1' is a name, Shen teaches "domain names". In addition to this, it is also noted that Kim et al. teaches domain names, and Kim et al. teaches the conversion of a domain name from one format to a different format. Examiner also notes that the phrase "Internet domain name" appears nowhere in Applicant's specification.

Applicant argues that the format of Kim et al. "is not an 'Internet domain name comprising a plurality of successive labels separated by dots". It is noted that the E.164 number is a name address that corresponds to an IP address (see paragraph [0035]). The name address is used by a DNS to look up an IP address (see paragraph [0035]). It is also noted that the labels in an IP address refer to different locations, such as a global, regional, and local identifiers. As such, the name address is an Internet domain name. Kim et al. uses dashes in place of dots. Shen teaches to use dots to separate labels.

Applicant argues that "Kim's failure to disclose to suggest an 'Internet domain name' as recited in the claims was presented in the response filed 26 October 2006.

The present Office Action fails to address this distinction and consequently is not fully responsive". It is noted that the arguments being referred to were filed in a response dated 26 October 2007, as stated by the applicant. It is noted that they were responded to in the Advisory action of 21 November 2007. It is also noted that these arguments did not reappear in the remarks filed 13 December 2007. Thus, as these arguments were already responded to in the advisory action and were not presented in the subsequent remarks, they were not responded to in the Office Action dated 9 March 2007. Thus, Examiner's response was fully responsive.

Applicant argues that "it is respectfully submitted that one of ordinary skill in the art would recognize that a DNS server typically receives a name address (with one example being an Internet domain name address) and provides a corresponding Internet address, Examiner notes that Kim et al. teaches a DNS receiving a name address and providing a corresponding Internet address in paragraph [0035].

Applicant argues that "one of ordinary skill in the art, reading Kim, would not confuse 'telephone number of E.164 format' with the claimed 'Internet domain name', nor would one of ordinary skill in the art, reading Kim, confuse the claimed 'Internet domain name' with an IP address". It is noted that the issue is a not a matter of confusion, but rather whether the references teach the claimed subject matter. As the claimed subject matter is an "Internet domain name", and as Kim et al. describes a

'domain name' for use in establishing a connection to the 'Internet', Kim et al. fully teaches an 'Internet domain name' as claimed.

Applicant argues that Kim et al. does not teach a 'domain name' due to paragraph [0033] in Kim et al. In response to this argument, Examiner notes that the 'name address' provided by Kim et al. in the form of an E.164 telephone number is an 'Internet domain name'. It is noted in paragraph [0029] that the terminal telephone number "should be composed of a complete shape in an order of a country identification number, a local identification number, and a subscribed telephone number based on the E.164 format." It is noted that 'a country identification number', 'a local identification number', and 'a subscriber telephone number' are all identifiers of domains. It is also noted that the number in Kim et al. is used to look up an IP address through a DNS. For all of these reasons, the number in Kim et al. is an "Internet domain name".

Applicant argues in regard to claims 5-7 that the number of labels in a domain name is not a size of the domain name. Examiner notes that applicant does not provide any reason that the number of labels in a domain name is not a size, other than a mere allegation. Examiner notes that Applicant's statement is merely allegation without the support of evidence. As stated previously, the question "How big is that domain name address?" could be answered with "20 characters" or "four labels". As such, the number of labels in an address is a matter of size. "Size" is also indicative of the size of memory taken up, as in an example where memory space for three labels must be allocated

instead of memory space for two labels. It is also noted that Kim et al. provides wherein a size is listed for decimal numbers (4 bits) (see paragraph [0030], and wherein labels are composed of decimal numbers). In addition to this, Kim et al. requires that there be at least two labels for conversion. One of ordinary skill in the art would recognize that it would be obvious to simply change the conditional number of labels such that only addresses with at least three labels are converted.

Applicant argues that "the cited case law is only applicable when 'only a size... is changing between the claimed invention and the prior art'. In this case, in addition to what the Office Action calls a size change, there is an additional change for which the Office Action was required to combine Shen and Kim, in order to hold the claims obvious". Examiner notes that the claimed difference of a size change occurs between the combination and Shen and Kim et al. and the current application. Thus, the only difference is a size changing between the prior art and the current application.

Applicant argues that the combination of the cited references would not relate to the improving of the performance of DNS servers, and that the motivation listed would not result in modifying Shen to provide what is claimed. Examiner notes that nowhere in the claims are DNS servers mentioned. Examiner also notes that the motivation would provide Shen with a condition before combining labels. The second recitation of Kim et al., of which applicant is uncertain to the reason it was cited, was provided because it shows how an IP address corresponds with a telephone number.

Applicant states that it would not have been obvious to combine the cited references because in each reference, the problem and solution disclosed are different from one another, and from the present application. In this case, the subject matter cited from each case deals with the subject matter claimed in Applicant's invention, notably "string manipulation". While Applicant mentions improving the performance of DNS servers in Applicant's arguments, Examiner notes that no mention of DNS servers, let alone improving their performance, can be found in the claims.

Applicant stated that the motivation necessary to combine Khello with the other cited references required is "to provide a reason for one ordinary skill in the art to combine the references (*i.e.* "do this **with that**"). It is noted that Khello states that it may be used to establish a communications session. It is also noted that the problem Shen is trying to solve is the establishment of a connection with an Internet terminal. Thus, one of ordinary skill in the art would have had sufficient reason to combine the references.

Applicant argues that the cited references are completely silent to the problem of "the nature of the conversion of E.164 numbers into Fully Qualified Domain Names, or the nature of any other similar conversions producing like FQDNs with plenty of short labels, can degrade the performance of the de-factor name servers". Applicant also argues that "the idea of using modified or converted FQDNs to improve the performance

of the name servers is not known from the references". Examiner notes that the claims are completely silent on such a problem as well, as none of the claims mention using a "Fully Qualified Domain Name" (the phrase stressed by Applicant from pages 24 – 25).

Applicant argues that the references are in a different field of endeavor as the application. However, as was pointed out in the office action of 9 March 2007, the claimed subject matter deals with nothing more than String Manipulation.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles D. Adams whose telephone number is (571) 272-3938. The examiner can normally be reached on 8:30 AM - 5:00 PM, M - F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571) 272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Charles Adams
AU2164
cj

C. Rones
CHARLES RONES
SUPERVISORY PATENT EXAMINER